The American Academy of Ophthalmology is an organization of 25,000 ophthalmologists (Eye M.D.s) dedicated to preserving eye health and sight.

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With proper help, children with learning disabilities can become very successful. Thomas Edison and Albert Einstein, for example, had learning disabilities, but went on to make great contributions during their lives.

The following organizations can provide further information on learning disabilities:

National Center for Learning Disabilities Inc.
381 Park Avenue South
New York, NY 10016

The Orton Society
724 York Road
Baltimore, MD 21204

The International Dyslexia Society
8600 LaSalle Road
Chester Building
Suite 382
Baltimore, MD 21286-2044

American Academy of Pediatrics
141 Northwest Point Boulevard
P.O. Box 927
Elk Grove Village, IL 60009-0927

Learning Disabilities Association of America
4156 Library Rd.
Pittsburgh, PA 15234-1349

notes

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learning disabilities

patient education

what is a learning disability?

A learning disability is a disorder in understanding or using spoken or written language. Individuals with learning disabilities may have average or even above-average intelligence, but experience problems with:

- reading;
- writing;
- listening;
- speaking;
- concentration;
- doing mathematical calculations.

Dyslexia is a type of learning disability that involves difficulty with reading.

The term **learning disabilities** does not apply to children who have learning problems caused by visual or hearing handicaps, mental retardation, emotional disturbance, or environmental, economic or cultural disadvantage.

what causes a learning disability?

Learning disabilities are often inherited. In many cases, however, the cause of a learning disability is not known.

Besides a family history of learning disabilities, other risk factors include low birth weight, stress before or after birth, infections of the central nervous system and severe head injuries.

There is little scientific evidence to show that poor vision, abnormal focusing, jerky eye movements and misaligned or crossed eyes cause learning disabilities.

Instead, research points to problems with how the brain interprets what is read. Normally, when we read, our brain relates visual images to previous experiences and known information (such as the meaning of words). A learning disability occurs when the brain processes this information differently.

what are the signs of a learning disability?

Before a child begins school, parents are usually not aware that their child has a learning disability.

In school situations, the following signs may suggest a learning disability:

- difficulty or dislike of reading;
- poor handwriting;
- slow writing speed;
- difficulty with math;
- difficulty putting information in order;
- difficulty understanding abstract concepts;
- memory problems;
- difficulty with language (for example, trouble following oral directions or remembering words).

Parents should be aware that children with learning disabilities may develop certain personality and behavioral problems.

Children with learning disabilities may become frustrated, lose interest in school work and soon try to avoid difficult tasks altogether.

Learning disabilities can also damage a child's developing self-image and cause emotional problems such as withdrawal, anxiety, depression or aggression.

do the eyes have anything to do with learning disabilities?

It may seem easy to blame reading problems on the eyes, but **learning disabilities are caused by the brain, not the eyes.** Children with learning disabilities do not have more visual problems than children without learning disabilities.

Your eye functions like a camera. After the eye "takes the picture," the image is sent to your brain by the optic nerve.

Your eyes do not understand what they see any more than a camera understands the photograph it takes. Until the photo is processed, it has no meaning. Similarly, until your brain interprets images seen by your eyes, the image has no meaning.

how are learning disabilities treated?

A child with a learning disability needs to practice academic skills and learn helpful strategies with the aid of a trained specialist, just as an athlete needs to practice under the eye of a coach.

No scientific evidence has shown that visual training, muscle, perceptual or hand/eye coordination exercises can improve a child's learning disability.

If you or your child's teachers suspect a learning disability, you should contact the school, and if necessary, the local or state Director of Special Education. Public law requires schools to evaluate any child who is thought to have a learning disability.

The evaluation is handled by educators and typically involves educational and psychological testing. Other evaluations may be conducted by a learning disabilities specialist, a speech/language pathologist, an audiologist or a school nurse.

A thorough medical eye examination can discover a visual defect that may affect reading.

It is important that parents and teachers participate in this process and are involved when decisions about the child's educational needs are being made.

Remedial training should be done by a certified learning disabilities specialist or tutor in special classes or schools.

A child with learning disabilities needs understanding and emotional support, as well as opportunities to experience success in other activities. Allowing a child to "release" tensions and frustrations through sports or artistic activities can be helpful.

are there cures for learning disabilities?

Learning disabilities are complex problems. There are no quick fixes. **Simple solutions, such as diet, megavitamins, sugar restriction, eye exercises, eyeglasses or vision training, do not cure learning disabilities.**

These approaches may delay the educational assistance that your child needs. Most of these treatments are costly, and your resources could be better spent on remedial educational programs.

(turn over)